

CLAIMS:

1. A method of forming a plastic lined tunnel comprising:
 - positioning a tube section of plastics material in a tunnel portion to be lined;
 - positioning a removable wall portion of an internal form assembly in the tube section to provide a temporary base wall wherein the internal form assembly further includes a collapsible wall portion;
 - engaging the base wall with at least one wall of the tunnel to retain the tube section in position;
 - transporting the collapsible wall portion along the temporary base wall into position for engagement with the temporary base wall within the tube section;
 - erecting the internal form assembly into an operative condition within the tube section as to conform the tube section to its desired shape;
 - introducing grout between the outer surface of the tube section and the tunnel wall so as to substantially fill the void therebetween and to retain the tube section in position;
 - collapsing the internal form assembly and removing the internal form assembly from the lined tunnel portion.
2. A method according to claim 1 wherein the tube section is formed with a smooth internal surface and a keyed outer surface for improving the bond between the tube section and the grout.
3. A method according to claim 1 wherein the tube section is a spiral wound tube produced from a strip of plastics material having T-shaped ribs extending about its external surface.
4. A method according to claim 1 wherein tube section forming a liner may be provided with locating means such as an external collar to form a socket into which the introduced end of the next tube section may spigot so as to align the abutting tube sections.

5. A method according to claim 1 wherein the internal form assembly suitably comprise a series of segments including upper segments pivotally connected to one another as the collapsible wall portion which is engageable with a temporary base wall, composed of a segment or segments.
6. A method according to claim 1 wherein the collapsible wall portion may be carried on a carriage which may move along the base wall.
7. A method according to claim 6 wherein the carriage includes transport means which extends beyond a tube section for transporting a base wall segment from beyond one end of a tube section to beyond the other end of the tube section for shifting the base wall segment or segments from a previously lined tunnel portion, through an adjacent lined section into a tube section introduced into an unlined tunnel portion.
8. A method according to claim 1 wherein the base wall is engaged with at least one wall of the tunnel by a locating means which extends beyond the ends of the tube section or through supports extending through the tube section.
9. A method according to claim 1 wherein the grout is cement.
10. A method according to claim 1 wherein the internal form assembly is moved into an adjoining portion of the tunnel into which a tube section has been positioned so as to progressively form a continuous plastic lined tunnel.
11. A ribbed plastic strip for forming spiral wound tubing comprising complementary edge formations which engage to form the spiral wound tube and each edge formation having an projection adapted for interlocking engagement with surrounding grout so as to hold the tube section in position against external pressure such as ground water pressure.
12. A ribbed plastic strip according to claim 11 wherein the edge formations engage so as to form an external groove between the joined edge formations into which bonding material may be placed to bond the strips together.

13. A method of forming a mandrel formed spiral wound pipe, comprising:
 - spiral winding plastic strip onto a mandrel;
 - joining together the adjacent edges of the strip to form a tube;
 - ejecting a fluid from the mandrel beneath the formed tube to free the formed tube from the mandrel; and
 - sliding the formed tube from the mandrel.

13. A method of forming a mandrel formed spiral wound pipe, comprising:
spiral winding plastic strip onto a mandrel;
joining together the adjacent edges of the strip to form a tube;
ejecting a fluid from the mandrel beneath the formed tube to free the formed tube from the mandrel; and
sliding the formed tube from the mandrel.